

REMARKS

Claims 1-8 are pending in the Application. Reconsideration and allowance of the Application based on the following remarks are respectfully requested.

Claim Rejections under 35 U.S.C. § 103

Claims 1-8 are rejected under 35 U.S.C. § 103(a) over Razzell U.S. Pat. 5,805,017 ("Razzell") in view of Miller et al. U.S. Pat. 7,079,604 ("Miller"). Applicants respectfully traverse the rejection in view of the following arguments.

The Office Action states that the limitation of claim 1 of "a signal processor for classifying each symbol oversampled by the converter into a subsample group according to a sample phase, and performing signal processing to adjust processing speeds" is the same as the signal processor for mapping shown in Fig. 3 of Razzell and discussed at col. 3, lines 30-35, and col. 6, lines 5-6 of Razzell.

Applicants respectfully disagree. Razzell is mapping and the claimed invention is classifying. The claimed invention is classifying "each symbol oversampled by the converter into a subsample group according to a sample phase." This means that at least two samples are classified into the same subsample group. For example, referring to Fig. 3 of Application (1,1), (2,1), (3,1), and (4,1) are all classified into the same subsample group based on "a sample phase." Applicants assert there is no subsample group in Razzell. The mapping in Razzell would be understood by one skilled in the art as digital demodulation and not classifying each symbol oversampled by the converter into a subsample group according to a sample phase. Therefore, Applicants assert that Razzell does not teach "a signal processor for classifying each symbol oversampled by the converter into a subsample group according to a sample phase, and performing signal processing to adjust processing speeds."

Additionally, Office Action admits on page 3 that Razzell does not teach "a timing selector for selecting an optimal symbol synchronization point from among values output by the integrator, generating a symbol timing signal and outputting it." The Office Action asserts that Miller remedies these limitations.

Applicants respectfully disagree. First, it is an object of Razzell "to demodulate complex signals at baseband in such a manner as to be able to make soft decisions on the demodulated

signals.” But, Miller is a system for and method for fast synchronization. (Miller, abstract.) Combining Miller to Razzell would turn Razzell into a system to synchronize with the source of the FSK symbols not to “be able to make soft decisions on the demodulated signals”; therefore, combining Miller to Razzell would render Razzell unsatisfactory for its intended purpose. “If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” (MPEP 2143.01, and *In re Gordon* 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

Second, Applicants assert that it would not be apparent to one skilled in the art how to combine Miller with Razzell. The Office Action states on page 3 that elements 240 and 280 of Fig. 4d of Miller can be combined with Razzell. But, the inputs to elements 240 and 280 of Miller are described as a correlation value which comes from the “incoming samples from the A/D converter 108” (Miller, col. 14, lines 42-44, lines 57). So, it is not clear how the circuit in Miller would be combined with Razzell, when Miller takes as an input a correlation value which comes from the incoming samples and Razzell gives as an output “maximum likelihood estimates.” (Razzell, abstract). Applicants respectfully request that the Examiner provide an explanation as to how Miller would be combined with Razzell. For the reasons stated above, Applicants respectfully assert that Miller cannot properly be combined with Razzell.

Because claims 2-4 depend from claim 1, claims 2-4 are traversed for the same reasons as claim 1. Because claims 5-8 contain similar limitations as claim 1, claims 5-8 are traversed for the same reasons as claim 1.

CONCLUSION

Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and a Notice to that effect is solicited.

Should any questions remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Date: March 26, 2007